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CLAIMS

1. An increase profit calculating apparatus,
comprising:

5 first marketing object screen creating means which
creates a first marketing object screen (205) for
displaying a first marketing object; and

10 increase profit screen creating means which is
operated in response to a click operation of a specific
mark on the first marketing object screen (205) and which
creates an increase profit screen (207) for displaying
increase profit by employing the first marketing object
instead of a second marketing object corresponding to
the first marketing object,

15 the increase profit screen (207) comprising:
question item fields (207a - 207d) which issues a
plurality of questions about works relating to the first
marketing object and the second marketing object and costs
for the works;

20 a field (207i) which displays a first total cost
due to use of the first marketing object within a
predetermined period;

25 a field (207j) which displays a second total cost
due to use of the second marketing object within the
predetermined period; and

a field (207k) which displays increase profit
obtained by employing the first marketing object instead
of the second marketing object,

30 wherein the increase profit calculating apparatus
is provided with calculating means which calculates the

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first and second total costs, and the increase profit according to answers to the questions from an operator.

2. An increase profit calculating apparatus
5 according to claim 1, wherein the marketing object includes a product such as a die apparatus, a mechanical part, a blade of a machine tool, a machine tool or the like, or service such as maintenance for the product.

10 3. An increase profit calculating apparatus according to claim 1, wherein the plurality of questions relating to the first marketing object and the second marketing object include a question about the number of works within a predetermined period, and a question about
15 a time required for one time work.

4. An increase profit calculating apparatus
according to claim 1, wherein the marketing object is a die apparatus, and the question item includes one of
20 a question group about the number of die apparatus operations per day, a die apparatus operation time per one time, a labor cost per predetermined time, and working days within a predetermined term;

a question group about personnel or mechanical
25 idling time caused by inferiority machining occurring due to use of a second die, labor cost within a predetermined time, and working days within a predetermined term; and

a question group about total working time within
30 a predetermined term in a case that predetermined

machining is performed using the second die, total working time within a predetermined term in a case that the same machining is performed using a first die, labor cost per predetermined time, and working days within a predetermined term.

5. An inferiority phenomena countermeasure guiding apparatus comprises: inferiority phenomena screen creating means which creates an inferiority phenomena screen (209) for displaying a plurality of inferiority phenomena in machining using a marketing object; and

inferiority phenomena cause screen creating means which is actuated by clicking a display portion of one inferiority phenomenon on the inferiority phenomena screen (209) to create an inferiority phenomena cause screen (211) for displaying causes of the one inferiority phenomenon.

6. An inferiority phenomena countermeasure guiding apparatus according to claim 5, wherein the inferiority phenomena cause screen (211) displays a list of the causes.

7. An inferiority phenomena countermeasure guiding apparatus according to claim 5, wherein the marketing object is a punching die, and the causes of inferiority phenomenon are spring fatigue, clearance unsuitableness and the like.

8. An inferiority phenomena countermeasure guiding

apparatus according to claim 6, further comprising avoidance information screen creating means which is actuated by clicking a display portion of one cause in a list of the causes to create an avoidance information
5 screen (213) for displaying information for avoiding the cause.

9. An inferiority phenomena countermeasure guiding apparatus according to claim 8, comprising new product
10 screen creating means which is actuated by clicking a predetermined portion of the inferiority phenomena cause screen (211) or the avoidance information screen (213) to create a new product screen (217) for displaying a new product for avoiding the inferiority phenomenon.

15 10. An inferiority phenomena countermeasure guiding apparatus according to claim 5, further comprising reference value screen creating means which is actuated by, when one cause in the inferiority
20 phenomena cause list is offset from a reference value of a predetermined parameter, clicking a display portion of the cause on the inferiority phenomena cause screen (211) to create a reference value screen (219) for displaying the reference value.

25 11. An inferiority phenomena countermeasure guiding apparatus according to claim 6, wherein a question field about characteristics of material for defining the reference value is provided on the reference value screen
30 (219).

12. An inferiority phenomena countermeasure
guiding apparatus according to claim 11, wherein the
characteristics of material are material quality and
5 plate thickness of a material.

13. An inferiority phenomena countermeasure
guiding apparatus according to claim 12, wherein a
question field about the current value of the parameter
10 is provided on the reference value screen (219).

14. An inferiority phenomena countermeasure
guiding apparatus according to claim 10, further
comprising accompanying disadvantage screen creating
15 means which is actuated by clicking a predetermined
portion on the reference value screen (219) to create
an accompanying disadvantage display screen (221) for
displaying other inferiority phenomena or disadvantages
which may occur due to the cause.

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15. An inferiority phenomena countermeasure
guiding apparatus, comprising cause/countermeasure
screen creating means which creates a
cause/countermeasure screen (223) which displays a cause
25 of an inferiority phenomenon in machining using a
marketing object and a plurality of a first kind of
countermeasures for avoiding the inferiority phenomenon
due to the cause; and

countermeasure explanation screen creating means
30 which is actuated by clicking a display portion of one

countermeasure on the cause/countermeasure screen to create a countermeasure explanation screen (225) for explaining specific contents of the countermeasure.

5 16. An inferiority phenomena countermeasure guiding apparatus according to claim 15, wherein the marketing object is a die for bending.

10 17. An inferiority phenomena countermeasure guiding apparatus according to claim 15, comprising new product screen creating means which is actuated by clicking a predetermined portion on the cause/countermeasure screen (223) or the countermeasure explanation screen (225) to create a new product screen
15 (227) for displaying a new product for avoiding the inferiority phenomenon due to the cause.

20 18. An inferiority phenomena countermeasure guiding apparatus according to claim 17, further comprising new product detail screen creating means which is actuated by clicking a predetermined portion on the new product screen (227) to create a new product detail screen (229) for displaying detail explanation such as suitable material/suitable apparatus/function or the
25 like of the new product.

 19. A question-answer accumulating apparatus comprising:

 means which inputs a question about a marketing
30 object;

means which inputs an answer to the question; and
means which stores the question and the answer in
a mutually related manner.

5 20. A die retrieval apparatus comprising:

die data input screen creating means which creates
die data input screens (231, 233) provided with a
plurality of fields in which features of a marketing
object are input; and

10 standard die screen creating means which is actuated
by inputting data items into respective fields on the
input screens (231, 233) and which, when a marketing
object corresponding to the respective data items exists,
creates a standard die screen (235) for displaying a price
15 relating to the marketing object and, when no marketing
object corresponding to the respective data items exists,
creates an error indication.

21. A die retrieval apparatus according to claim
20, wherein the plurality of fields in which features
of a marketing object are input include a field (231a)
in which a shape of the marketing object is input, a field
(233a) in which the kind of a machine in which the marketing
object can be used is input, fields (233c, 233e) in which
25 the structure of the marketing object is input, and fields
(233d, 233f) in which the material quality of the
marketing object is input.

22. A die retrieval apparatus according to claim
30 21, wherein a part list name of the marketing object and

a price of each part are displayed on the standard die screen (235).

23. A product parameter setting apparatus
5 comprising:

marketing object shape selection screen creating means which creates shape pattern selection screens (237, 239) for selecting a shape relating to a marketing object to be set with parameters; and

10 marketing object size parameter input screen creating means which is actuated according to selection and input of a specific shape pattern on the marketing object shape selection screens to create a marketing object size parameter input screen (241) in which size
15 parameters of predetermined portions about the selected marketing object shape.

24. An apparatus according to claim 23, wherein the shape parameter selection screens (237, 239) includes
20 a field (237a) for selecting the kind of the marketing object to be set with parameters and a field (237c) for allowing a shape pattern relating to the marketing object to be set with parameters.

25 25. A product parameter setting apparatus according to claim 24, wherein the marketing object size parameter input screen (241) comprises

a shape pattern display field (241b) which displays the selected marketing object shape pattern and a size
30 parameter input portion necessary for specifying the

shape of the marketing object to be set with parameters,
and

a size parameter input field (241c) which allows
input of size parameters of the input portion.

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26. A product parameter setting apparatus according
to claim 25, further comprising parameter setting means
which performs parameter setting on marketing object
products which are classified on the basis of shape
patterns of marketing objects, the parameter setting
being performed according to correspondence relationship
between the shapes of the marketing objects which have
been stored in advance and size parameter groups necessary
for specifying the shapes of the marketing objects.

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27. A product parameter setting apparatus according
to claim 26, wherein the shape pattern is stored so as
to correspond to a plurality of size parameter groups
necessary for specifying the shape of the marketing object
which belongs to the shape pattern, and

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the marketing object size parameter input screen
(241) includes a size input pattern selection field which
allows selection of one size parameter from the plurality
of size parameter groups.

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28. A product parameter setting apparatus according
to claim 26 ~~or 27~~, wherein the shape pattern selection
screens (237, 239) further comprises an application shape
display field (239c) which displays one or plural shape
sub-patterns included in shape variations of the selected

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shape pattern.

29. A product automatic designing apparatus (product parameter setting apparatus), comprising:

5 marketing object shape pattern selection screen creating means which creates a shape pattern selection screen (237) which allows selection of a trimming hole shape of a marketing object apparatus used for machining of a predetermined kind, such as a punching or the like; and

10 marketing object size parameter input screen creating means which is actuated according to the selection and input of a specific trimming hole shape pattern on the marketing object shape selection screen to create a marketing object size parameter input screen

15 (241) which allows input of size parameters about the trimming hole shape pattern of the selected marketing object, wherein

the shape pattern selection screen (237) includes

20 at least a field which allows selection of the kind of a marketing object to be designed (to be set with parameters), and

a field which allows selection of the trimming hole shape pattern of the marketing object to be designed (to

25 be set with parameters); and

the marketing object size parameter input screen (241) includes at least a shape pattern display field (241b) which display the trimming shape pattern of the selected marketing object and an input portion of size

30 parameters necessary for specifying the trimming hole

shape of the marketing object to be designed (to be set with parameters), and
a size parameter input field (241c) which allows input of size parameters of the input field.

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30. A product automatic designing apparatus (product parameter setting apparatus), comprising:

marketing object shape pattern selection screen creating means which creates a shape pattern selection screen (249) which allows selection of a shape of a marketing object used for machining of a predetermined kind, such as a bending or the like; and

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marketing object size parameter input screen creating means which is actuated according to the selection and input of a specific shape pattern on the marketing object shape selection screen to create a marketing object size parameter input screens (251, 253) which allow input of size parameters about the shape pattern of the selected marketing object, wherein

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the shape pattern selection screen (249) includes at least a field (249a) which allows selection of the kind of the marketing object to be designed (to be set with parameters), and

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a field which allows selection of the shape pattern relating to the marketing object to be designed (to be set with parameters); and

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the marketing object size parameter input screens (251, 253) include at least a shape pattern display field (251a) which displays the selected marketing object shape pattern and main size data of the marketing object shape

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pattern, and

a size parameter input field which allows shift of the selected shape pattern and input of size parameters for specifying a desired shape.

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31. A machining possibility calculating apparatus comprising:

marketing object data input means which inputs marketing object data including shape data of a predetermined marketing object specified by a shape pattern and size parameters of a marketing object to be designed, structure data of the marketing object, and material quality data;

material data input means which inputs material data including features of material to be machined by the marketing object; and

machining verification means which verifies whether or not the marketing object to be designed is capable of being machined on the basis of the input marketing object data and material data.

32. A machining possibility calculating apparatus according to claim 31, wherein the features of the material to be machined includes the plate thickness and the material quality of a plate material.

33. A machining possibility calculating apparatus according to claim 32, wherein the machining verification means performs the verification by comparing the resisting pressure of the marketing object obtained

according to strength calculation from the marketing
object data and machining requiring pressure necessary
for machining which is performed by the marketing object
which has been obtained from the material data with each
5 other.

a 34. A machining possibility calculating apparatus
according to claim 31 ~~or 33~~, wherein the machining
verification means performs the verification by checking
10 consistency between the input size data pieces.

a 35. A machining possibility calculating apparatus
^{Claim 31}
according to [^]~~any one of claims 31 to 34~~, wherein, when
the marketing object to be designed is a die for machining
15 of a predetermined kind such as punching or the like,
the marketing object data includes structures and
material qualities of a punch and a die, and a clearance
between the punch and the die.

a 36. A machining possibility calculating apparatus
^{Claim 31}
according to [^]~~any one of claims 31 to 34~~, wherein, when
the marketing object to be designed is a die apparatus
for machining of a predetermined kind such as bending
or the like, the marketing object data further includes
25 a tip end R, a tip end angle of the die, and a V width
of the die.

37. An automatic estimate creating apparatus
comprising:

30 input means which inputs product data to be estimated,

the number of the products and customer data;

estimate data storage means which stores delivery time data corresponding to the product and discount rate data of the product to its price; and

5 detail estimate information creating means which outputs detail estimate information on the basis of the input data, wherein

the detail estimate information to be output includes a deliverable day according to the delivery time data and discount amount according to the discount rate data.

38. An automatic estimate creating apparatus according to claim 37, wherein the product data to be estimated is input by specifying the shape of the product and/or the material quality thereof.

39. An automatic estimate creating apparatus according to claim 37 ~~or 38~~, wherein the input means further inputs special mention specification data about the input product, and

when the special mention specification is charged, the detail estimate information creating means further adds a price corresponding to the special mention specification to a marketing price of the product and creates estimate information on the basis of a marketing unit price after added.

40. An order reception information creating apparatus comprising:

order reception information screen creating means which displays an order reception information screen of a order-received product at a marketing place; and

order reception information transmitting means
5 which is actuated by clicking a specific mark on the order reception information screen to transmit the order reception to a manufacture end.

41. An order reception information creating
10 apparatus according to claim 40, further comprising delivery data update display means which changes a delivery day of a product received in response to the transmission of the order reception according to a manufacture schedule to display the changed delivery day
15 on the order reception information screen.

42. A computer readable storage medium which stores a computer program which allows a computer to function as any one of the apparatuses according to ^{claim 1} ~~claims 1 to~~
20 41.